

Current and Proposed SSO Regulations

**Sewer and Grease
Training Seminar**

Sept. 12, 2002

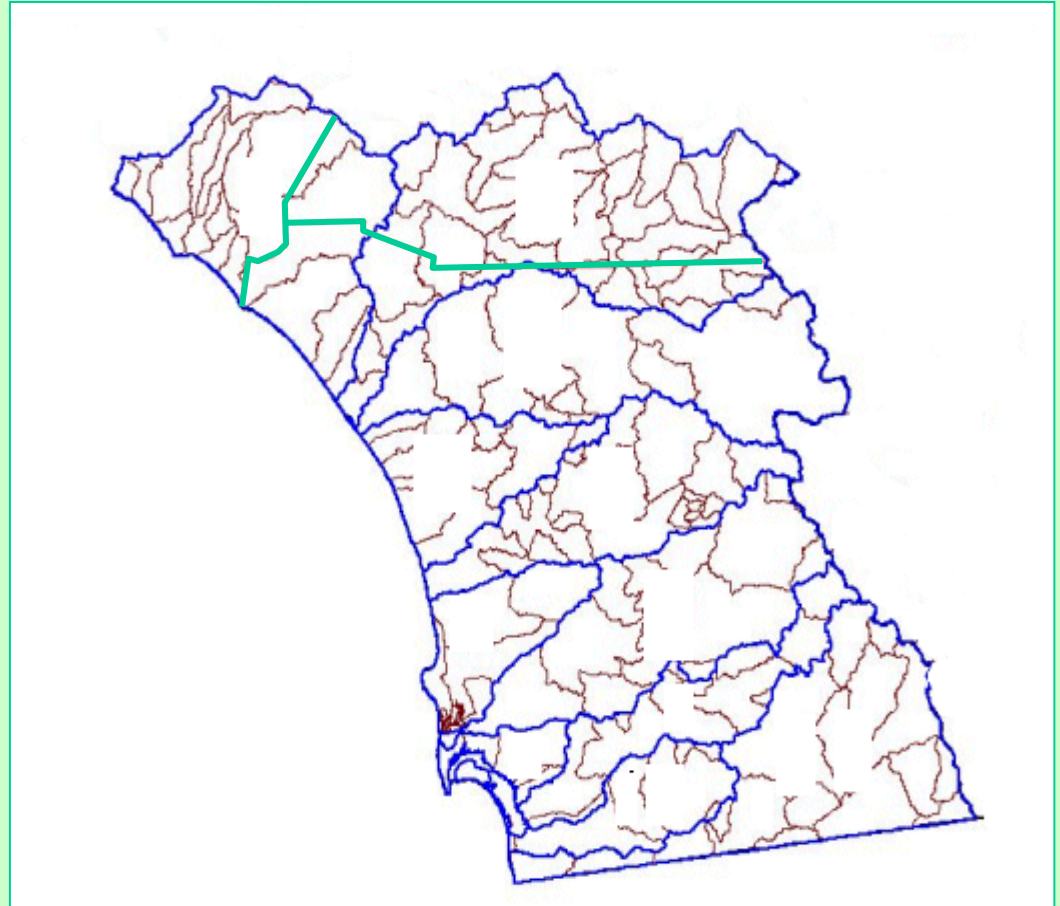
Victor Vasquez

*Regional Water Quality Control Board
San Diego Region*

Regional Water Quality Control Board San Diego Region

Mission Statement

*Our mission is to preserve
and enhance the quality of
California's water
resources and ensure their
proper allocation and
efficient use for the benefit
of present and future
generations.*



About the RWQCB

- **9 Board Members**
- **Technical and support staff**

Implement

- **Federal Clean Water Act**
- **California Water Code**
- **San Diego Basin Plan**

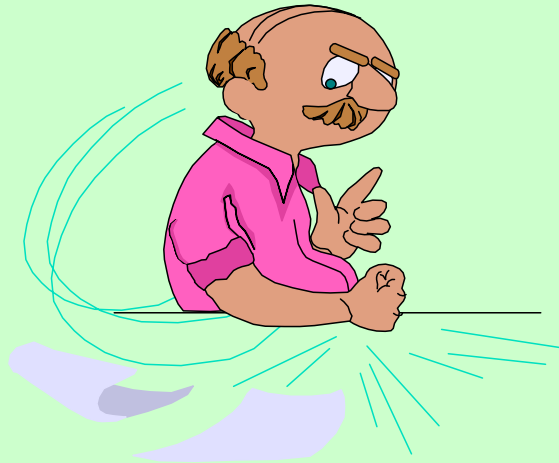
Major Programs

- **Publicly-owned Treatment Works**
- **Industrial Dischargers**
- **Stormwater**
- **Underground Storage Tanks**
- **Groundwater Protection**
- **Total Daily Maximum Loads**

ORDER NO. 96-04

General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies

→ 48 cities and special districts



- Prohibition***
- Requirements***
- Reporting***
- Enforcement***

PROHIBITION

“The discharge of sewage from a sanitary sewer system at any point upstream of a sewage treatment plant is prohibited.”



PROHIBITION



- *Spills from public collection systems*
- *Spills upstream of treatment plants*
- *Spills due to failures in public collection systems*

REQUIREMENTS

- ***Control, terminate, recover SSOs***
- ***Take corrective actions***
- ***Maintain SSO Prevention Plan***
- ***Maintain SSO Response Plan***
- ***Maintain records***
- ***Allow RWQCB inspections***

REQUIREMENTS

SSO Response

- ***Control or Limit volume of overflow***
- ***Terminate discharge as rapidly as possible***
- ***Recover overflow and washdown water***



REQUIREMENTS

Corrective Action

- ***Monitor to determine nature and impact of overflow***
- ***Minimize or correct adverse impact on the environment***

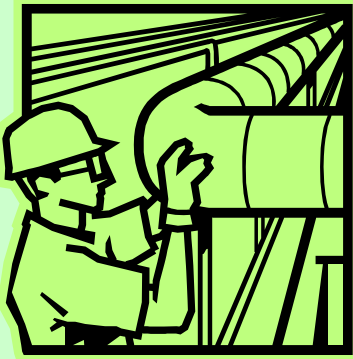


Possible SSO Impacts

- **Public health risks**
 - *bacteria and viruses*
- **Environmental damage**
 - *low oxygen, high nitrogen and phosphorus*
- **Impairment of Beneficial Uses**
 - *Closure of recreational waters
(beaches, lagoons, rivers)*
 - *Impact on aquatic habitats
(marine, freshwater)*
 - *Contamination of water supplies
(reservoirs, groundwater wells)*

REQUIREMENTS

SSO Prevention Plan



Document designed to
prevent SSOs or
minimize potential

- *Inspection schedules*
- *Maintenance/cleaning schedules*
- *Grease control program*
- *System upgrades*
- *Capacity assurance*

REQUIREMENTS SSO Response Plan



Document designed to **minimize SSO volume** and **minimize adverse effects**



- *SSO detection (e.g., alarms, metering, citizen reports)*
- *Response plan for all SSO scenarios*
- *Clean-up and mitigation*
- *Notification of public agencies*
- *Posting plan for recreational waters*
- *Water quality monitoring plan*

REQUIREMENTS

SSOPP/SSORP

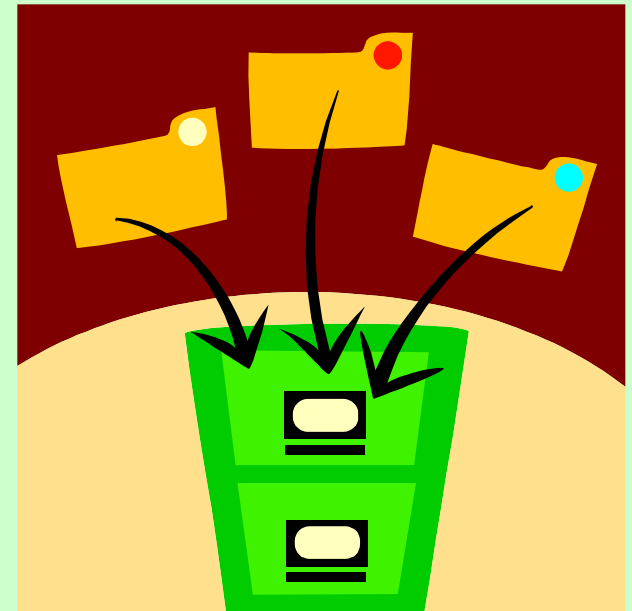
- **Make available to sewer system personnel**
- **Maintain in up-to-date condition**
- **Review and revise after each SSO**
 - ***Working, living documents***
 - ***Customized for your system and organization***

REQUIREMENTS

Records

Record keeping for five years

- *SSO reports*
- *Monitoring reports*
- *Instrument maintenance records*
- *Facilities maintenance records*

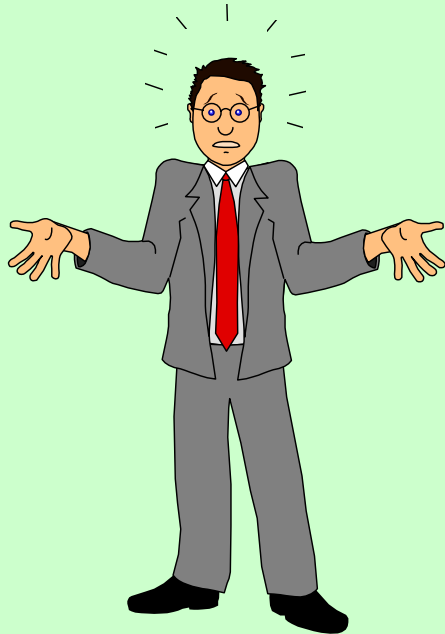


REQUIREMENTS

Entry & Inspection

- **Annual RWQCB Inspection**
- **Spill Investigation**
 - ***Facilities***
 - ***Equipment inventory***
 - ***Record review***
 - ***Practices and operations***
 - ***Sampling as necessary***





What spills get reported ?
and when?

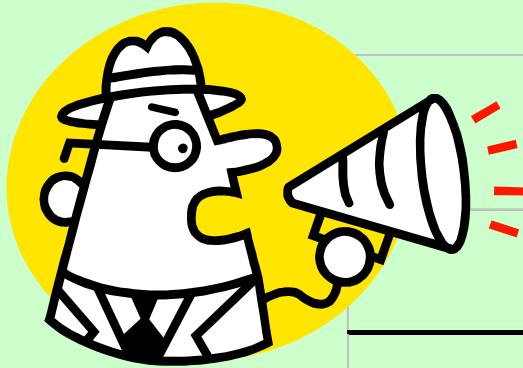
Surface waters include:

- ***Pacific Ocean***
- ***rivers***
- ***streams***
- ***ephemeral streams***
- ***lagoons***
- ***dry arroyos***
- ***storm drains and MS4s***
- ***“tributaries thereto”***



REPORTING

RWQCB



	<i>Reaches surface waters</i>		<i>No surface water</i>	
	<i>Less than 1000 gal</i>	<i>1000 gal or more</i>	<i>Less than 1000 gal</i>	<i>1000 gal or more</i>
24-hr report	Y	Y	N	Y
5-day written report	Y	Y	N	Y
Quarterly Electronic Report	Y	Y	Y	Y

24-hour report

- ***phone, fax, voicemail***

5-day written report

- ***Follow-up to 24-hour report***
- ***Order 96-04 SSO Report Form***
- ***“Penalty of perjury” statement***

Quarterly Reporting

- ***ALL SPILLS regardless of volume or destination***
- ***EXCEL file on disk***
- ***If no spills, send letter and specify Order 96-04 and quarter***
- ***“Penalty of perjury” statement***



REPORTING

Private Property SSOs

Reporting to RWQCB

- *not required by Order No. 96-04*
- *may be required by Stormwater permit*
- *courtesy notification (24-hour, 5-day, quarterly)*

If you do report

- **Responsible Agency**
 - › **indicate “Private property” and sewer agency**
- **Remarks section**
 - › **name and phone number of owner**
 - › **other details**

Other Required Notification

For all SSOs (public or private)

- *Report to Office of Emergency Services*
 - *all spills 1,000 gallons or more*
- *Report to County Health or Environ. Health*
 - *all known spills*
- *Reporting under AB 285*

Report Reviews

24-hour reports and Five Day Written Reports

- Review***
- Take appropriate action***
 - phone, investigation, enforcement***

Quarterly electronic reports

- Records, databases***

Records and Databases

Who uses them? Purpose?

- . Update Regional Board members on SSOs***
- . Evaluate trends by sewer agency and by region***
- . US EPA***
- . Public Information***

Example of Monthly Executive Officer Summary Reports

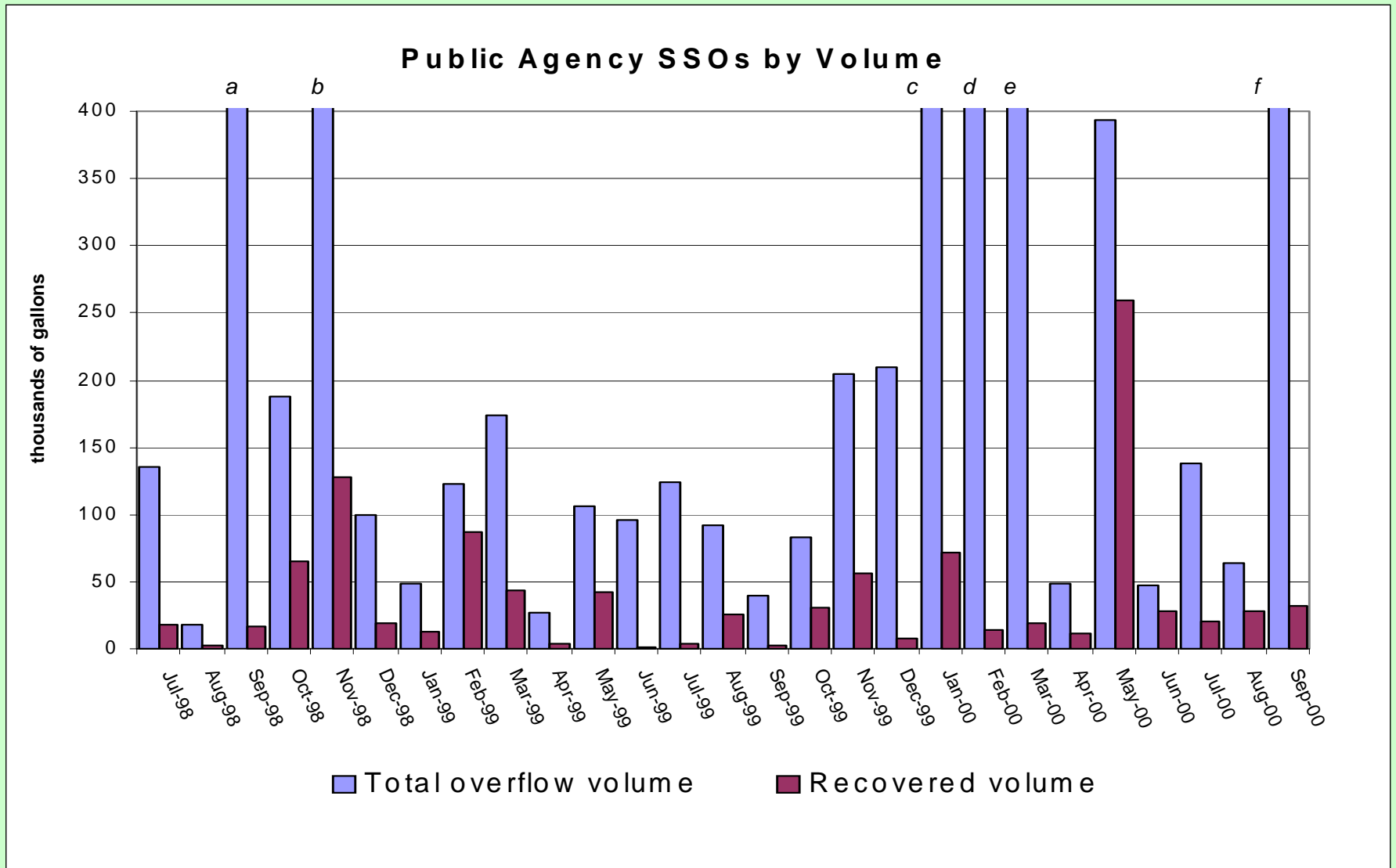
SANITARY SEWER OVERFLOW STATISTICS (Updated through July 2002)

	System Size ^B (miles of sewer lines)	NUMBER OF SEWAGE SPILLS (LISTED BY FISCAL YEAR, JULY 1 THROUGH JUNE 30)					SPILLS PER 100 MILES (LISTED BY FISCAL YEAR)			
SEWAGE COLLECTION AGENCY		1998-99	1999-2000	2000-01	2001-02 ^A	2002-03 ^A	1998-99	1999-2000	2000-01	2001-02 ^A
ORANGE COUNTY:										
EL TORO WD	75	2	0	0	3	0	2.7	0.0	0.0	4.0
EMERALD BAY SERVICE DISTRICT	6	0	0	1	0	0	0.0	0.0	16.7	0.0
IRVINE RANCH WD	50	2	0	1	0	0	4.0	0.0	2.0	0.0
LAGUNA BEACH, CITY OF	90	12	14	24	10	3	13.3	15.6	26.7	11.1
LOS ALISOS WD (<i>absorbed by Irvine Ranch WD, January 2001</i>)										
MOULTON NIGUEL WD	530	11	13	13	2	0	2.1	2.5	2.5	0.4
SAN CLEMENTE, CITY OF	150	2	8	9	9	0	1.3	5.3	6.0	6.0
SAN JUAN CAPISTRANO, CITY OF	96	1	0	1	0	0	1.0	0.0	1.0	0.0
SANTA MARGARITA WD	300	4	8	13	13	0	1.3	2.7	4.3	4.3
SOUTH COAST CWD	150	5	18	12	5	1	3.3	12.0	8.0	3.3
TRABUCO CANYON WD	43	2	0	0	0	0	4.7	0.0	0.0	0.0
RIVERSIDE COUNTY:										
EASTERN MWD	250	2	1	6	1	0	0.8	0.4	2.4	0.4
ELSINORE VALLEY MWD	49	0	1	1	0	0	0.0	2.0	2.0	0.0
MURRIETA MWD (<i>included with Eastern MWD</i>)										
RANCHO CA WD	150	3	4	0	1	0	2.0	2.7	0.0	0.7
SAN DIEGO COUNTY:										
BUENA SANITARY DISTRICT	84.1	3	0	0	1	0	3.6	0.0	0.0	1.2
CARLSBAD MWD	144	18	14	12	8	0	12.5	9.7	8.3	5.6
CHULA VISTA, CITY OF	420	1	1	7	6	0	0.2	0.2	1.7	1.4
CORONADO, CITY OF	46	34	17	11	3	0	73.9	37.0	23.9	6.5
DEL MAR, CITY OF	29.9	3	1	2	2	0	10.0	3.3	6.7	6.7
EL CAJON, CITY OF	188	0	3	3	2	1	0.0	1.6	1.6	1.1
ENCINITAS, CITY OF	80	1	2	4	2	0	1.3	2.5	5.0	2.5
ESCONDIDO, CITY OF	340	17	5	10	12	0	5.0	1.5	2.9	3.5
FAIRBANKS RANCH COMM SERV DIST	12.5	0	2	0	0	0	0.0	16.0	0.0	0.0
FALLBROOK PUBLIC UTILITY DIST ^C	72	9	19	27	9	1	12.5	26.4	37.5	12.5
IMPERIAL BEACH, CITY OF	84	0	7	9	1	0	0.0	8.3	10.7	1.2
LA MESA, CITY OF	145	5	5	3	6	0	3.4	3.4	2.1	4.1
LEMON GROVE, CITY OF	65.5	6	7	3	8	1	9.2	10.7	4.6	12.2

Example of Periodic Sewer Agency Evaluations

Wastewater Collection Agency	System Size (miles of sewer lines) (1999-2000)	Total # SSOs	Total SSO volume (gallons)	Recovered SSO Volume (gal)	Total # SSOs per mile	Total SSO volume (gal) per mile	% SSO Volume Recovered
City of Coronado	46	20	3,350.0	2350	0.435	72.8	70.1
City of Chula Vista	420	3	2,600.0	1900	0.007	6.2	73.1
City of Del Mar	29.9	3	1,790.0	400	0.100	59.9	22.3
Eastern MWD	250	1	2,000.0	2000	0.004	8.0	100.0
City of El Cajon	188	3	23,875.0	7800	0.016	127.0	32.7
Carlsbad MWD	144	14.00	4,002.0	190.00	0.097	27.8	4.7
City of San Diego	2800	443	35,612,342.2	213002.5	0.158	12718.7	0.6
Moulton Niguel WD	700	17	35,500.0	6800	0.024	50.7	19.2
City of Oceanside	450	37	2,046,200.0	6510	0.082	4547.1	0.3
San Diego County, Public Works	380	4	2,375.0	0	0.011	6.3	0.0
City of Escondido	340	6	6,180.0	2115	0.018	18.2	34.2

Example of Periodic Regional Trends Analysis



ENFORCEMENT

Purpose

- ***Address incidence of actual or threatened non-compliance***
- ***Bring violation to discharger's attention***
- ***Give discharger opportunity to correct violation***
- ***Deterrence***
- ***Polluters do not gain an economic advantage***
- ***Compensation for environmental damage***

Examples of Significant SSOs

- ***Beach closure and/or posting for health advisory***
- ***To impaired water bodies***
- ***1,000 gallons or more reaching surface waters/waters of the state***
- ***> 10,000 gallon spill***

ENFORCEMENT

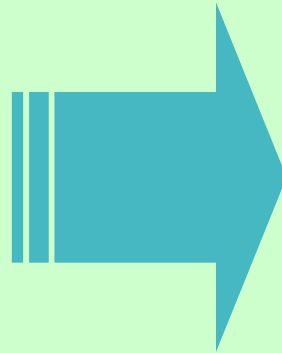
Types of Actions

- ***Notice of Violation (NOV)***
- ***Request for Technical Information***
- ***Cleanup And Abatement Orders***
- ***Cease And Desist Orders***
- ***Referral to AG or DA***
- ***Administrative Civil Liabilities***

Maximum Civil Liability

<u>WC Section</u>	<u>Liability</u>
13268(b)	<i>\$1,000 per day</i>
13308	<i>\$10,000 per day</i>
13350	<i>\$10 per gallon, max \$5000 per day</i>
13385	<i>\$10,000 per day and \$10 per gallon</i>

***Order No.
96-04***



CMOM

US EPA Proposed SSO Rule

Main Elements

- *Prohibition*
- *Record Keeping and Reporting of SSOs*
- *Public Notice*
- *Capacity, Management, Operation and Maintenance*

US EPA Proposed SSO Rule

SSO Rule will apply to

- ***Municipal collection systems discharging directly to a POTW treatment facility***
- ***Municipal satellite collection systems***

US EPA Proposed SSO Rule

Prohibition

- **“Municipal sanitary sewer system discharges that occur prior to a POTW treatment facility are prohibited.”**
- **Possible exceptions**
 - *SSO caused by severe natural conditions and no feasible alternative*
 - *SSO caused by factors beyond the reasonable control of responsible agency*

US EPA Proposed SSO Rule

Record Keeping and Reporting|

- *Maintain required information and records for every SSO for three years*
- *24-hour reports that may endanger human health*
- *Periodic reports of SSOs to waters of the US*
- *Annual reports for all SSOs*

US EPA Proposed SSO Rule

Public Notification for spills that may impact public health

- *the general public*
- *health agencies*
- *drinking water suppliers*
- *other affected agencies*

US EPA Proposed SSO Rule

Capacity, Management, Operation and Maintenance (CMOM)

- ***Proper MOM - at all times, all portions of collection system***
- ***Adequate capacity***
- ***Stop and mitigate impacts of SSOs***
- ***Notify parties that may be affected by SSOs***

US EPA Proposed SSO Rule

CMOM (continued)

- **Organization structure - Identify administrative and maintenance positions and lines of authority**
- **Identify chain of communication for SSO reporting**

US EPA Proposed SSO Rule

CMOM (continued)

- **Identify legal authority to control SSOs**
 - ***Ordinances***
 - ***Service agreements***
 - ***Design, installation and inspection requirements for sewers and pumps***
 - ***Agreements with satellite collection systems***
 - ***Implementation of pre-treatment program***

US EPA Proposed SSO Rule

CMOM (continued)

- **Identify CMOM measures and activities**
 - ***Maintenance of sewer facilities***
 - ***Maintenance of collection system map***
 - ***Prioritize CMOM activities***
(root or grease problems, eliminate discharges to beaches)
 - ***Capacity assurance***
 - ***Rehabilitation projects***
 - ***Equipment and Parts inventory***
 - ***Staff training***

US EPA Proposed SSO Rule

CMOM (continued)

- **Overflow response plan**
 - ***Detection of overflows***
 - ***Ensure SSOs are responded to***
 - ***Ensure proper SSO reporting***
 - ***Ensure proper public notification***
 - ***Staff training***

US EPA Proposed SSO Rule

CMOM (continued)

- **Capacity Assurance Plan**
 - ***Evaluation of capacity - peak flows, bottlenecks, major sources of flow***
 - ***Establish short and long-term plans to increase capacity***
 - ***Update the CAP***

US EPA Proposed SSO Rule

CMOM (continued)

- **Audit CMOM effectiveness**
- **Interested parties participation and input in CMOM development**

Last slide!

For more information

- ***RWQCB, Order No. 96-04 ,SSOs***

<http://www.swrcb.ca.gov/rwqcb9/Programs/SSO/sso.html>

- ***US EPA, SSO Rule, CMOM***

<http://cfpub.epa.gov/npdes/sso/ssorule.cfm>

- ***RWQCB Contact***

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